

## Practical 3

### Aim:

To Perform various data manipulation commands, aggregate functions and sorting concept on all created tables.

(1) List total deposit from deposit.

**Query:** select sum(amount) from deposit

### Output:

User: 22DCE006

Home > SQL > **SQL Commands**

Autocommit Display 10 ▾

```
select sum(amount) from deposit
```

**Results Explain Describe Saved SQL History**

| SUM(AMOUNT) |
|-------------|
| 39500       |

1 rows returned in 0.00 seconds [CSV Export](#)

(2) List total loan from karolbagh branch

**Query:** select sum(amount) from deposit where bname='karolbagh'

### Output:

User: 22DCE006

Home > SQL > **SQL Commands**

Autocommit Display 10 ▾

```
select sum(amount) from deposit where bname='karolbagh'
```

**Results Explain Describe Saved SQL History**

| SUM(AMOUNT) |
|-------------|
| -           |

1 rows returned in 0.00 seconds [CSV Export](#)

(3) Give maximum loan from branch vrce.

**Query:** select MAX(amount) from deposit where bname='VRCE'

**Output:**

User: 22DCE006

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Autocommit Display 10 ▾

```
select MAX(amount) from deposit where bname='VRCE'
```

---

**Results Explain Describe Saved SQL History**

| MAX(AMOUNT) |
|-------------|
| -           |

1 rows returned in 0.00 seconds [CSV Export](#)

(4) Count total number of customers

**Query:** select count(cname) from Customer

**Output:**

User: 22DCE006

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```
select count(cname) from Customer
```

---

**Results Explain Describe Saved SQL History**

| COUNT(CNAME) |
|--------------|
| 6            |

1 rows returned in 0.00 seconds [CSV Export](#)

(5) Count total number of customer's cities.

**Query:** select count(distinct city) from Customer

**Output:**

User: 22DCE006

[Home](#) > [SQL](#) > **SQL Commands**
 Autocommit 

```
select count(distinct CITY) from Customer
```

[Results](#) [Explain](#) [Describe](#) [Saved SQL](#) [History](#)

| COUNT(DISTINCT CITY) |
|----------------------|
| 4                    |

1 rows returned in 0.00 seconds

[CSV Export](#)

(6) Create table supplier from employee with all the columns.

**Query:** create table supplier as (select \* from employee)

**Output:**

User: 22DCE006

[Home](#) > [SQL](#) > **SQL Commands**
 Autocommit 

```
create table supplier as (select * from employee)
```

[Results](#) [Explain](#) [Describe](#) [Saved SQL](#) [History](#)

Table created.

0.02 seconds

(7) Create table sup1 from employee with first two columns.

**Query:** create table sup1 as (select emp\_no,emp\_name from employee)

**Output:**

User: 22DCE006

Home > SQL > **SQL Commands** Autocommit Display 10 ▾

```
create table sup1 as (select emp_no,emp_name from employee)
```

---

[Results](#) [Explain](#) [Describe](#) [Saved SQL](#) [History](#)

---

Table created.

0.00 seconds

(8) Create table sup2 from employee with no data

**Query:** create table sup2 as (select \* from employee where 1=0)

**Output:**

User: 22DCE006

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```
create table sup2 as (select * from employee where 1=0)
```

---

[Results](#) [Explain](#) [Describe](#) [Saved SQL](#) [History](#)

---

Table created.

0.01 seconds

(9) Insert the data into sup2 from employee whose second character should be 'n' and string should be 5 characters long

in employee name field.

**Query:** insert into sup2 select \*from employee where emp\_name like '\_n\_\_'

**Output:**

User: 22DCE006

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Autocommit Display 10 ▾

```
insert into sup2 select *from employee where emp_name like '_n__'
```

Results Explain Describe Saved SQL History

2 row(s) inserted.

0.00 seconds

(10) Delete all the rows from sup1.

**Query:** delete sup1

**Output:**

User: 22DCE006

Home > SQL > SQL Commands

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```
Delete sup1
```

Results Explain Describe Saved SQL History

7 row(s) deleted.

0.02 seconds

(11) Delete the detail of supplier whose sup\_no is 103.

**Query:** delete from supplier where emp\_no=103;

**Output:**

```
User: 22DCE006
Home > SQL > SQL Commands
 Autocommit Display 10 ▾
delete from supplier where emp_no=103;
```

**Results Explain Describe Saved SQL History**

1 row(s) deleted.

0.01 seconds

(12) Rename the table sup2.

**Query:** rename sup2 to supply

**Output:**

```
User: 22DCE006
Home > SQL > SQL Commands
 Autocommit Display 10 ▾
rename sup2 to supply;
```

**Results Explain Describe Saved SQL History**

Statement processed.

0.01 seconds

(13) Destroy table sup1 with all the data.

**Query:** drop table sup1;

**Output:**

User: 22DCE006

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```
drop table sup1;
```

**Results Explain Describe Saved SQL History**

Table dropped.

0.05 seconds

(14) Update the value dept\_no to 10 where second character of emp. name is 'm'.

**Query:** update employee set dept\_no=10 where emp\_name like '\_m%'

**Output:**

User: 22DCE006

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```
update employee set dept_no=10 where emp_name like '_m%'
```

**Results Explain Describe Saved SQL History**

2 row(s) updated.

0.00 seconds

(15) Update the value of employee name whose employee number is 103.

**Query:** update employee set emp\_name='David' where emp\_no = 103

**Output:**

User: 22DCE006

Home > SQL > **SQL Commands**

Autocommit Display 10 ▾

```
update employee set emp_name='David' where emp_no = 103
```

---

Results Explain Describe Saved SQL History

1 row(s) updated.

0.00 seconds

(16) Add one column phone to employee with size of column is 10.

**Query:** alter table employee add phone number(10)

**Output:**

User: 22DCE006

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```
alter table employee add phone number(10)
```

---

Results Explain Describe Saved SQL History

Table altered.

0.03 seconds

(17) Modify the column emp\_name to hold maximum of 30 characters.

**Query:** alter table employee modify emp\_name varchar2(30);

**Output:**

User: 22DCE006

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```
alter table employee modify emp_name varchar2(30);
```

**Results Explain Describe Saved SQL History**

Table altered.

0.02 seconds

(18) Count the total no as well as distinct rows in dept\_no column with a condition of salary greater than 1000 of employee

**Query:** select count(distinct emp\_no) from employee where emp\_sal>1000

**Output:**

User: 22DCE006

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Autocommit Display 10 ▾

```
select count(distinct emp_no) from employee where emp_sal>1000
```

**Results Explain Describe Saved SQL History**

| COUNT(DISTINCTEMP_NO) |
|-----------------------|
| 6                     |

1 rows returned in 0.00 seconds [CSV Export](#)

(19) Display the detail of all employees in ascending order, descending order of their name and no.

**Query:** select \*from employee order by emp\_name asc,emp\_no desc

**Output:**

User: 22DCE006  
Home > SQL > **SQL Commands**

Autocommit Display 10 ▾

```
select *from employee order by emp_name asc,emp_no desc;
```

---

**Results Explain Describe Saved SQL History**

| EMP_NO | EMP_NAME | EMP_SAL | EMP_COMM | DEPT_NO | L_NAME | DEPT_NAME               | JOB_ID  | LOCATION  | MANAGER_ID | HIREDATE  | PHONE |
|--------|----------|---------|----------|---------|--------|-------------------------|---------|-----------|------------|-----------|-------|
| 103    | David    | 1100    | 0        | 20      | wales  | machine learning        | mk_mgr  | ontario   | 105        | 30-NOV-95 | -     |
| 104    | aman     | 3000    | -        | 10      | sharma | virtual reality         | comp_op | mexico    | 12         | 02-OCT-97 | -     |
| 107    | anamika  | 2975    | -        | 30      | jha    | artificial intelligence | it_prog | new york  | -          | 15-JUL-97 | -     |
| 105    | anita    | 5000    | 50000    | 10      | patel  | big data analytics      | comp_op | germany   | 107        | 01-JAN-98 | -     |
| 101    | smith    | 800     | -        | 10      | shah   | machine learning        | fi_mgr  | toronto   | 105        | 09-AUG-96 | -     |
| 106    | sneha    | 2450    | 24500    | 10      | joseph | big data analytics      | fi_acc  | melbourne | 105        | 26-SEP-97 | -     |
| 102    | snehal   | 1600    | 300      | 25      | gupta  | data science            | lec     | las vegas | -          | 14-MAR-96 | -     |

7 rows returned in 0.00 seconds [CSV Export](#)

(20) Display the dept\_no in ascending order and accordingly display emp\_comm in descending order.

**Query:** select \*from employee order by dept\_no asc,emp\_comm desc

**Output:**

User: 22DCE006  
Home > SQL > **SQL Commands**

Autocommit Display 10 ▾

```
select *from employee order by dept_no asc,emp_comm desc;
```

---

**Results Explain Describe Saved SQL History**

| EMP_NO | EMP_NAME | EMP_SAL | EMP_COMM | DEPT_NO | L_NAME | DEPT_NAME               | JOB_ID  | LOCATION  | MANAGER_ID | HIREDATE  | PHONE |
|--------|----------|---------|----------|---------|--------|-------------------------|---------|-----------|------------|-----------|-------|
| 101    | smith    | 800     | -        | 10      | shah   | machine learning        | fi_mgr  | toronto   | 105        | 09-AUG-96 | -     |
| 104    | aman     | 3000    | -        | 10      | sharma | virtual reality         | comp_op | mexico    | 12         | 02-OCT-97 | -     |
| 105    | anita    | 5000    | 50000    | 10      | patel  | big data analytics      | comp_op | germany   | 107        | 01-JAN-98 | -     |
| 106    | sneha    | 2450    | 24500    | 10      | joseph | big data analytics      | fi_acc  | melbourne | 105        | 26-SEP-97 | -     |
| 103    | David    | 1100    | 0        | 20      | wales  | machine learning        | mk_mgr  | ontario   | 105        | 30-NOV-95 | -     |
| 102    | snehal   | 1600    | 300      | 25      | gupta  | data science            | lec     | las vegas | -          | 14-MAR-96 | -     |
| 107    | anamika  | 2975    | -        | 30      | jha    | artificial intelligence | it_prog | new york  | -          | 15-JUL-97 | -     |

7 rows returned in 0.00 seconds [CSV Export](#)

(21) Update the value of emp\_comm to 500 where dept\_no is 20.

**Query:** update employee set emp\_comm=500 where dept\_no = 20

**Output:**

User: 22DCE006

Home > SQL > **SQL Commands**

Autocommit   Display 10 ▾

```
update employee set emp_comm=500 where dept_no = 20
```

Results Explain Describe Saved SQL History

1 row(s) updated.

0.02 seconds

(22) Display the emp\_comm in ascending order with null value first and accordingly sort employee salary in descending order.

**Query:** select \* from employee order by emp\_comm asc nulls first, emp\_sal desc

**Output:**

User: 22DCE006

Home > SQL > **SQL Commands**
 Autocommit 

```
select *from employee order by emp_comm asc nulls first,emp_sal desc;
```

[Results](#) [Explain](#) [Describe](#) [Saved SQL](#) [History](#)

| EMP_NO | EMP_NAME | EMP_SAL | EMP_COMM | DEPT_NO | L_NAME | DEPT_NAME               | JOB_ID  | LOCATION  | MANAGER_ID | HIREDATE  | PHONE |
|--------|----------|---------|----------|---------|--------|-------------------------|---------|-----------|------------|-----------|-------|
| 104    | aman     | 3000    | -        | 10      | sharma | virtual reality         | comp_op | mexico    | 12         | 02-OCT-97 | -     |
| 107    | anamika  | 2975    | -        | 30      | jha    | artificial intelligence | it_prog | new york  | -          | 15-JUL-97 | -     |
| 101    | smith    | 800     | -        | 10      | shah   | machine learning        | fi_mgr  | toronto   | 105        | 09-AUG-96 | -     |
| 102    | snehal   | 1600    | 300      | 25      | gupta  | data science            | lec     | las vegas | -          | 14-MAR-96 | -     |
| 103    | David    | 1100    | 500      | 20      | wales  | machine learning        | mk_mgr  | ontario   | 105        | 30-NOV-95 | -     |
| 106    | sneha    | 2450    | 24500    | 10      | joseph | big data analytics      | fi_acc  | melbourne | 105        | 26-SEP-97 | -     |
| 105    | anita    | 5000    | 50000    | 10      | patel  | big data analytics      | comp_op | germany   | 107        | 01-JAN-98 | -     |

7 rows returned in 0.00 seconds

[CSV Export](#)

(23) Display the emp\_comm in ascending order with null value last and accordingly sort emp\_no in descending order.

**Query:** select \*from employee order by emp\_comm asc nulls last,emp\_no desc;

**Output:**

User: 22DCE006

Home > SQL > **SQL Commands**
 Autocommit 

```
select *from employee order by emp_comm asc nulls last,emp_no desc;
```

[Results](#) [Explain](#) [Describe](#) [Saved SQL](#) [History](#)

| EMP_NO | EMP_NAME | EMP_SAL | EMP_COMM | DEPT_NO | L_NAME | DEPT_NAME               | JOB_ID  | LOCATION  | MANAGER_ID | HIREDATE  | PHONE |
|--------|----------|---------|----------|---------|--------|-------------------------|---------|-----------|------------|-----------|-------|
| 102    | snehal   | 1600    | 300      | 25      | gupta  | data science            | lec     | las vegas | -          | 14-MAR-96 | -     |
| 103    | David    | 1100    | 500      | 20      | wales  | machine learning        | mk_mgr  | ontario   | 105        | 30-NOV-95 | -     |
| 106    | sneha    | 2450    | 24500    | 10      | joseph | big data analytics      | fi_acc  | melbourne | 105        | 26-SEP-97 | -     |
| 105    | anita    | 5000    | 50000    | 10      | patel  | big data analytics      | comp_op | germany   | 107        | 01-JAN-98 | -     |
| 107    | anamika  | 2975    | -        | 30      | jha    | artificial intelligence | it_prog | new york  | -          | 15-JUL-97 | -     |
| 104    | aman     | 3000    | -        | 10      | sharma | virtual reality         | comp_op | mexico    | 12         | 02-OCT-97 | -     |
| 101    | smith    | 800     | -        | 10      | shah   | machine learning        | fi_mgr  | toronto   | 105        | 09-AUG-96 | -     |

7 rows returned in 0.00 seconds

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**Conclusion:** From this practical I learned about different SQL commands that can be used for data manipulation and also used for sorting the data according to the requirement.

**Staff Signature:**

**Grade:**

**Remarks by the Staff:**